

REMARKS

This Amendment After Final Rejection is submitted in response to the outstanding final Office Action, dated November 18, 2005. Claims 1 through 24 are presently pending in the above-identified patent application. In this response, Applicants
5 propose to amend claims 1, 10, 17, and 22. No additional fee is due.

This amendment is submitted pursuant to 37 CFR §1.116 and should be entered. The Amendment places all of the pending claims, i.e., claims 1 through 24, in a form that is believed allowable, and, in any event, in a better form for appeal. It is believed that examination of the pending claims as amended, which are consistent with
10 the previous record herein, will not place any substantial burden on the Examiner. In any case, a Request for Continued Examination is being submitted herewith.

In the Office Action, the Examiner rejected claims 1, 4-6, 8-10, 13-16, 22, and 23 under 35 U.S.C. §102(b) as being anticipated by Ireton (United States Patent Number 5,797,120), rejected claims 17, 18, 20, and 21 under 35 U.S.C. §102(b) as being
15 anticipated by Tohkura et al., "Spectral Smoothing Technique in PARCOR Speech Analysis-Synthesis," rejected claims 2 and 11 under 35 U.S.C. §103(a) as being unpatentable over Ireton, rejected claims 3, 12, and 19 under 35 U.S.C. §103(a) as being unpatentable over Ireton and Tohkura et al., and further in view of Pearson (United States Patent Number 5,400,434), and rejected claims 7 and 24 under 35 U.S.C. §103(a) as
20 being unpatentable over Ireton, and further in view of Tohkura et al.

Independent Claims 1, 10, 17 and 22

Independent claims 1, 10, and 22 were rejected under 35 U.S.C. §102(b) as being anticipated by Ireton, and claim 17 was rejected under 35 U.S.C. §102(b) as being anticipated by Tohkura et al. Regarding claim 1, the Examiner asserts that Ireton
25 teaches "increasing an amount of energy in low frequency components of said pitch contour" (col. 8, lines 23-40). Regarding claim 17, the Examiner asserts that Tokhura discloses "filtering said pitch contour with an impulse response filter having a pole at a desired low frequency value" (section Bandwidth expansion method). In the Response to Arguments section of the final Office Action, the Examiner asserts that "the element
30 impulse train generator is pitch contour generator" in Ireton.

Applicants note that, in the text cited by the Examiner, Ireton teaches that “the gain controls 308a through 308n *enable the power or energy in each of the frequency sub-bands to be **individually controlled*** and enable a wide range of band-variable noise sequences...The band-variable noise generator 300 of the present invention can *selectively add noise* to various parts of the signal spectrum, thus providing a distinct naturalness to the speech signal.” (Col. 8, lines 25-40; emphasis added.) Ireton does not, however, disclose or suggest *enhancing the natural sound of concatenated synthesized speech segments* by increasing an amount of energy in low frequency components of said *pitch contour*.

Applicants note that, in the text cited by the Examiner, Tokhura teaches a method to “eliminate extremely sharp peaks in the spectral envelope.” Applicants could find no disclosure or suggestion by Tokhura to filter the pitch contour with an impulse response filter having a pole at a desired low frequency value, and could find no disclosure or suggestion of *enhancing the natural sound of concatenated synthesized speech segments* by increasing an amount of energy in low frequency components of said *pitch contour*.

Independent claims 1 and 22, as amended, require *enhancing the natural sound of concatenated synthesized speech segments* by increasing an amount of energy in low frequency components of said pitch contour. Independent claim 10, as amended, requires *enhancing the natural sound of concatenated synthesized speech segments* by adding band limited noise to said pitch contour. Independent claim 17, as amended, requires “*enhancing the natural sound of concatenated synthesized speech segments by filtering said pitch contour with an impulse response filter having a pole at a desired low frequency value.*”

Thus, Ireton and Tohkura et al., alone or in any combination, do not disclose or suggest *enhancing the natural sound of concatenated synthesized speech segments* by increasing an amount of energy in low frequency components of said pitch contour, as required by independent claims 1 and 22, as amended, do not disclose or suggest *enhancing the natural sound of concatenated synthesized speech segments* by adding band limited noise to said pitch contour, as required by independent claim 10, as amended, and do not disclose or suggest *enhancing the natural sound of concatenated*

synthesized speech segments by filtering said pitch contour with an impulse response filter having a pole at a desired low frequency value, as required by independent claim 17, as amended.

Dependent Claims 2-9, 11-16, 18-21 and 23-24

5 Dependent claims 4-6, 8, 9, 13-16, and 23 were rejected under 35 U.S.C. §102(b) as being anticipated by Ireton, claims 18, 20, and 21 were rejected under 35 U.S.C. §102(b) as being anticipated by Tohkura et al., claims 2 and 11 were rejected under 35 U.S.C. §103(a) as being unpatentable over Ireton, claims 3, 12, and 19 were rejected under 35 U.S.C. §103(a) as being unpatentable over Ireton and Tohkura et al.,
10 and further in view of Pearson, and claims 7 and 24 were rejected under 35 U.S.C. §103(a) as being unpatentable over Ireton, and further in view of Tohkura et al.

 Claims 2-9, 11-16, 18-21 and 23-24 are dependent on claims 1, 10, 17, and 22, respectively, and are therefore patentably distinguished over Ireton, Tohkura et al., and Pearson (alone or in any combination) because of their dependency from amended
15 independent claims 1, 10, 17, and 22 for the reasons set forth above, as well as other elements these claims add in combination to their base claim.

 All of the pending claims, i.e., claims 1-24, are in condition for allowance and such favorable action is earnestly solicited.

 If any outstanding issues remain, or if the Examiner has any further
20 suggestions for expediting allowance of this application, the Examiner is invited to contact the undersigned at the telephone number indicated below.

 The Examiner's attention to this matter is appreciated.

Respectfully submitted,

25



Date: February 16, 2006

30

Kevin M. Mason
Attorney for Applicants
Reg. No. 36,597
Ryan, Mason & Lewis, LLP
1300 Post Road, Suite 205
Fairfield, CT 06824
(203) 255-6560